

All in ONE

Solar Street Light



SPECIFICATION

LRC-H (30W-120W)



Efficient
Solar Module



Smart Control
System



High Performance
Li-Battery



Up to date
LED



Professional
Optical Design



Integrated
Design



Strong Structural
Design



Auto-Control
PIR/Timer



Easy
Maintenance



IP65

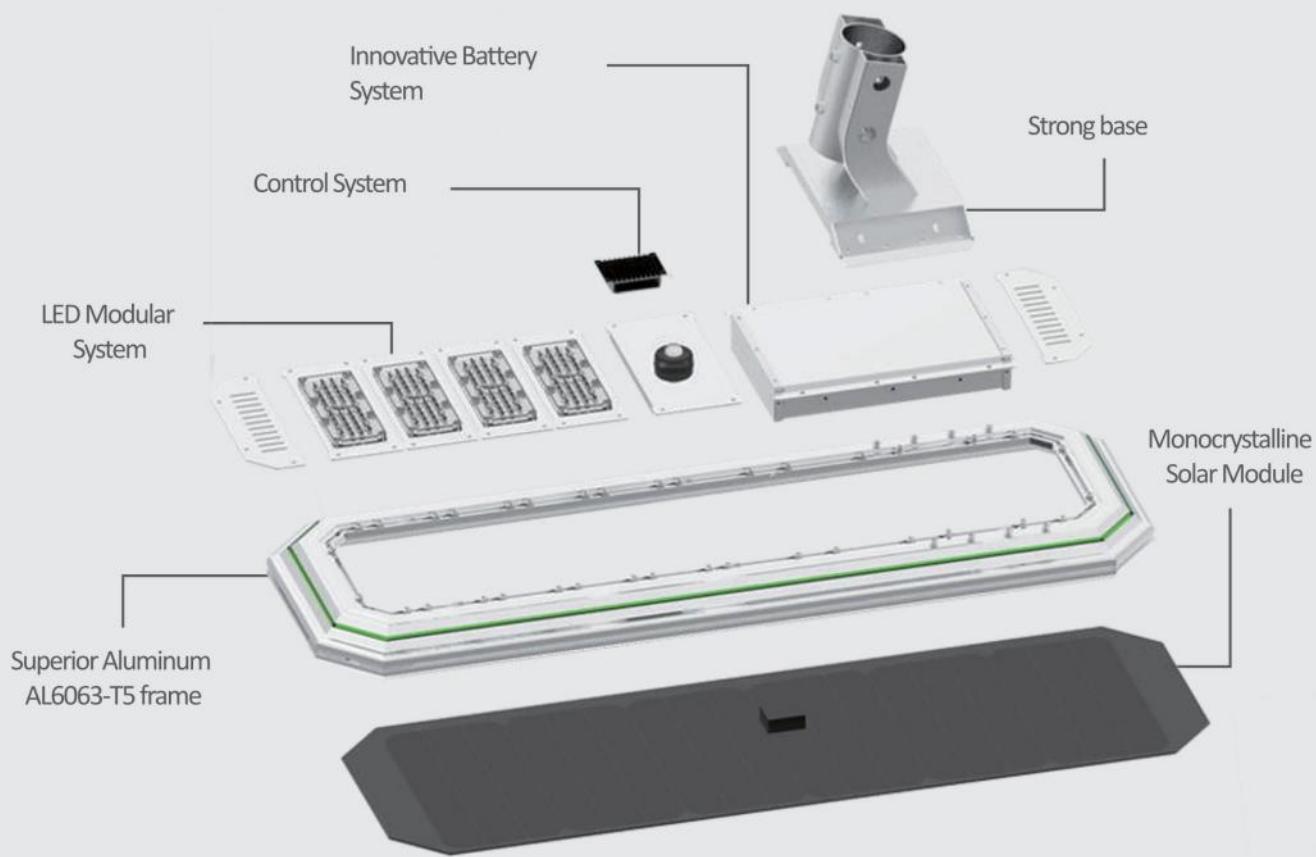


A.Up-to-day LED Technology with LED Modular Thermal Design

B.Smart Battery Protection System,
More stable quality and longer lifespan

C.Modular Design, Battery can be drawn out easily

Simple installation, easy maintenance.
Each part is imaginative,
All materials are carefully selected.
Protected against all weathers.



Technical Data

LRC-H Series

Model	LRC-H30W	LRC-H40W	LRC-H60W	LRC-H80W	LRC-H100W	LRC-H120W
Physical Parameter						
LED Brand	PHILIPS	PHILIPS	PHILIPS	PHILIPS	PHILIPS	PHILIPS
LED Qty(pcs)	72	108	144	256	256	384
Power of PV Module(W)	18V 60W	18V 70W	18V 90W	18V 110W	36V 120W	36V 160W
LiFePO4 Battery Capacity	12.8V 307.2Wh	12.8V 384Wh	12.8V 460.8Wh	12.8V 537.6Wh	25.6V 768Wh	25.6Ah 921.6Wh
Light Mode	PIR/Time Control	PIR/Time Control	PIR/Time Control	Time Control	Time Control	Time Control
Product Dimension(mm)	753*373*60	893*373*60	1123*373*60	1173*423*60	1413*423*60	1713*423*60
Product N.W.(kg)	12	14	17	22	24	32.8
Package #1 Dimension(mm)& G.W. (2 Lamps/CTN)	820*260*460 (20.7KG)	960*260*460 (24.2KG)	1190*260*460 (29.5KG)	1240*260*510 (37.5KG)	1480*330*510 (46.1KG)	1780*330*510 (50.85KG)
Package #2 Dimension(mm)& G.W. (2 Bases/CTN)	380*380*190 (7KG)	380*380*190 (7KG)	380*380*320 (10.93KG)	430*380*320 (10.93KG)	510*430*450 (20.85KG)	510*430*450 (20.85KG)
Light Parameter						
Light Power(W)	30W	40W	60W	80W	100W	120W
Tyical Liminous Flux(Lm)	5400	7200	10800	14400	18000	21600
LED Light Effect(Lm/W)	200Lm/W					
Color Temperature(K)	2700-6500					
Beam Angle(°)	150°x 80°					
Rainy Days(D)	3~5					
Environment Parameter						
Charging Temperaure(°C)	0 °C ~ +60 °C					
Discharging Temperature(°C)	-20 °C to +60 °C					
Storage Temperature(°C)	-20 °C to +45 °C					
Installations						
Dia. of Top Pole (mm)	50~60	50~60	70~80	70~80	90~100	90~100
Installation Height(m)	4~6	5~7	6~8	8~10	9~11	10~12
Installation Distance (m)	15~25	20~30	25~35	30~40	35~45	40~50

Core Technology

Solar Panel

Monocrystalline Solar Panels



- ◆ Adopts high quality semiconductor Solar cells;
- ◆ Weak light power generation is good
- ◆ Independent production of solar panels, comprehensive quality control;
- ◆ High conversion efficiency up to 23%



A grade Cell



Stable



ECO Green



High Rate



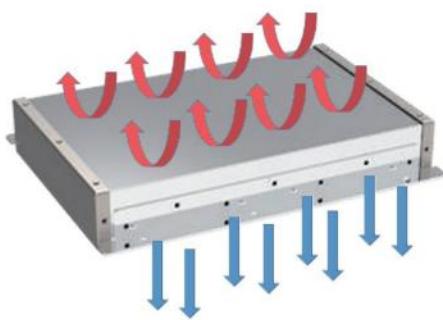
25 years Lifespan

Battery

Integrated Battery Protection System

- ◆ Military grade LiFePO4 Battery, High Safety and stability
- ◆ Long lifespan, More than 1500 Battery light cycles
- ◆ Secure metal structure around battery
- ◆ Overcharge and over discharge protection

Heat Prevention (Top)



Heat Dissipation (Bottom)

② Batteries



Core Technology

LED Lights



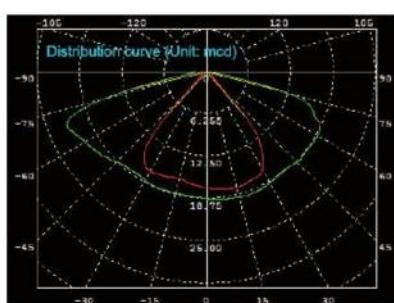
Super Bright LEDs

- ◆ Up to date Super Bright LEDs, Lighting effect up to 200Lm/W
- ◆ Drive by low current, more energy efficient, Lighting efficiency increased by 20%
- ◆ Ultra-low light decay, lifespan up to 80,000 hours

LED Modular System Design

- ◆ Rectangular bat wing light distribution for road lighting
Optimized light distribution for a more uniform and wider lighting area
- ◆ Integrated optical lens design, Light transmittance up to 93%
- ◆ Customized heat sink, better heat dissipation and waterproof ability

Bat Wing light distribution curve

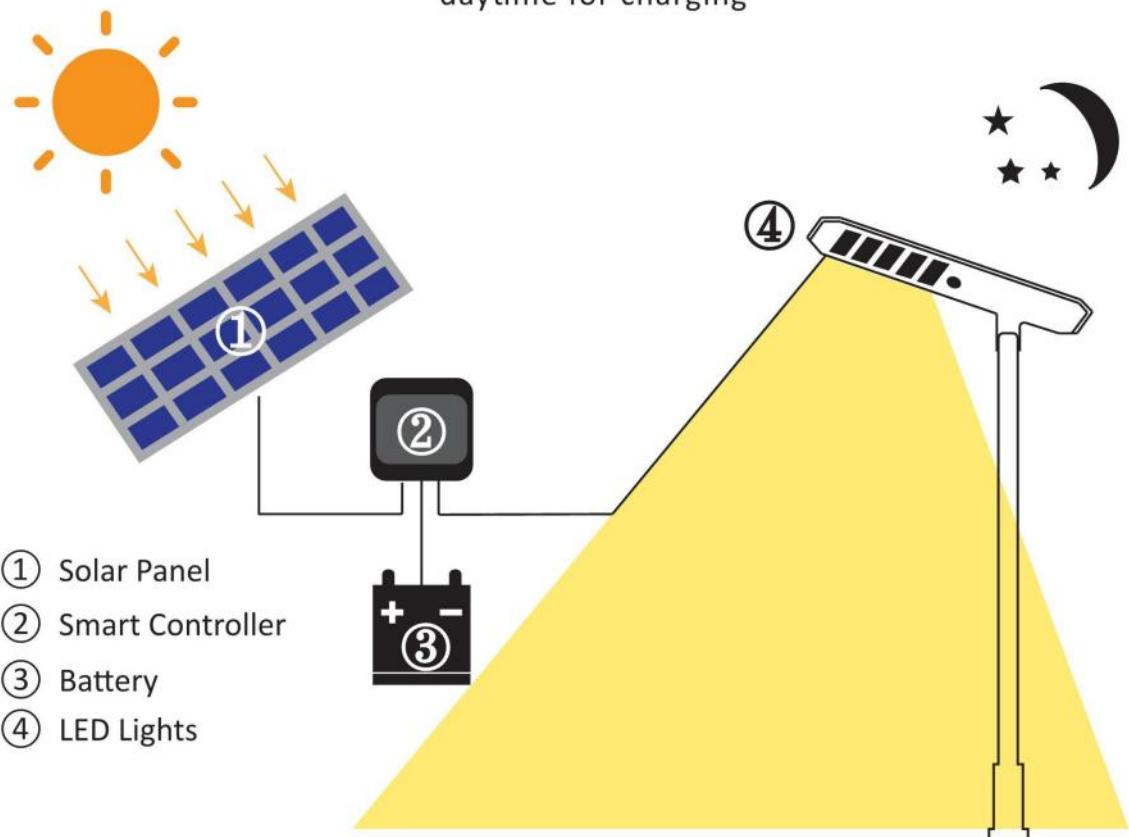


Core Technology

Controller

Smart Controller

- ◆ Real constant current control, reduce LED light attenuation and extend the lifespan
- ◆ Protecting the battery when charging in high or low temperature
- ◆ Charging efficiency is 92%, LED driving efficiency above 95%
- ◆ Intelligent energy management, adjust the power output and extend the light hours according to the battery capacity
- ◆ Light control: Turn on at night and turn off in the daytime for charging



Smart Control

Light Mode: PIR Sensor

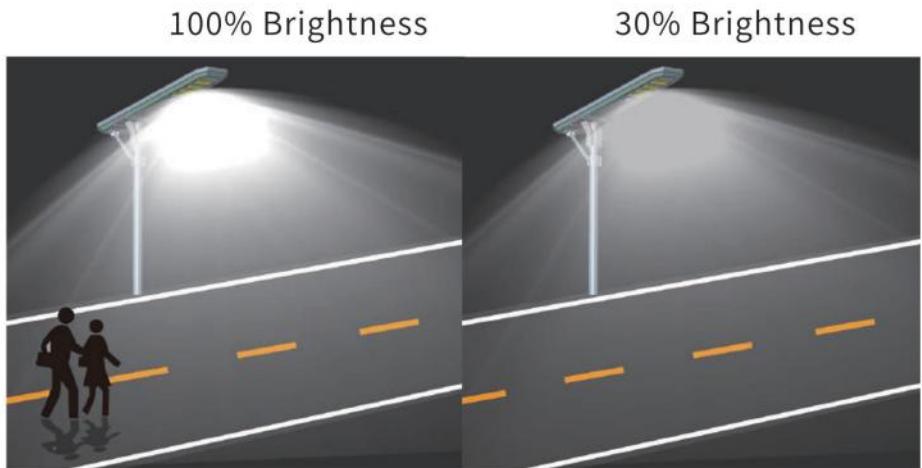
PIR Sensor:

① 100% Brightness:

When the motion detected, the lamp will shift to 100% brightness automatically

② 30% Brightness:

The lamp stay on with 30% brightness when no motion



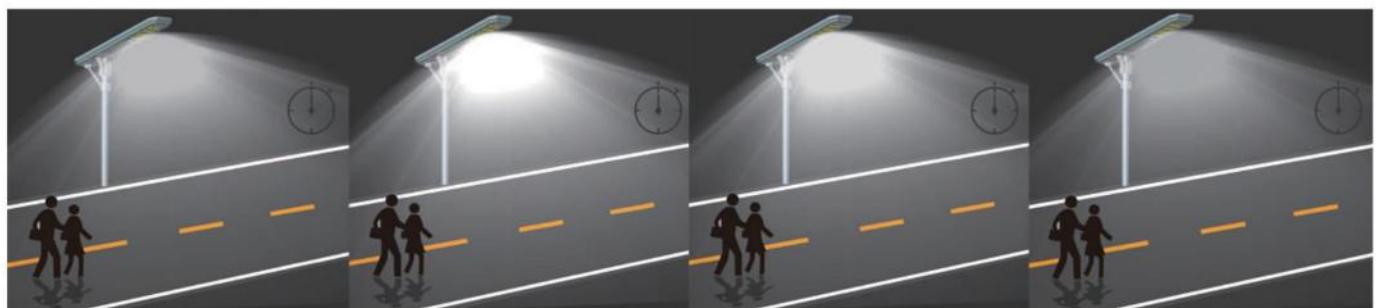
Light Mode: Time Control

Time Control

The lamp will stay on according to below hours and lighting percentage (12H)

It will shift and turn on/off automatically

① 1H @ 30% Brightness ② 2H @ 100% Brightness ③ 2H @ 50% Brightness ④ 7H @ 20% Brightness



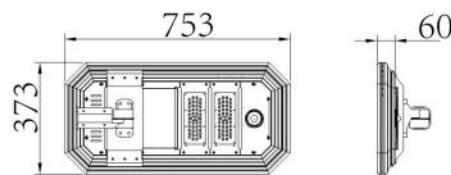
Remark: Please contact us for customization on light mode and brightness

Installation



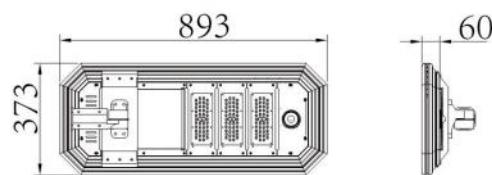
Product Size

30W

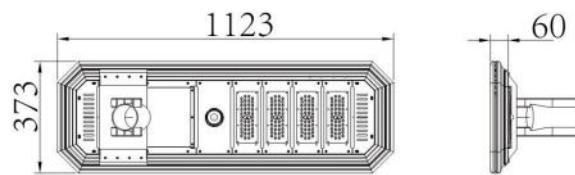


Unit:mm

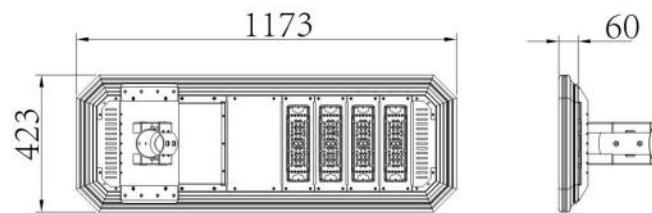
40W



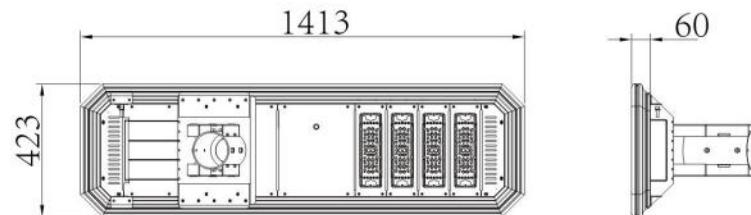
60W



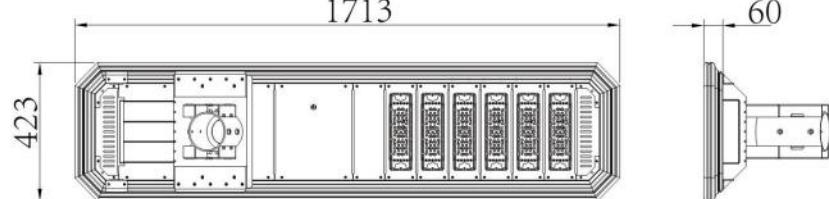
80W



100W



120W



Structure Design

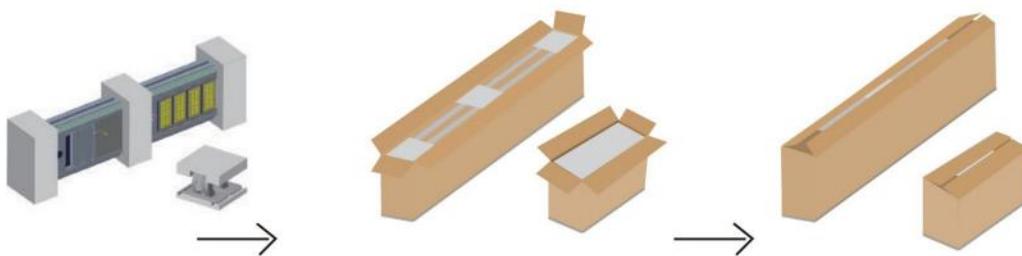
Easy Maintenance



High Strength



Packing Details



Model	Carton details (2 cartons)	Packaging size (mm)	G.W (kg)	20GP (set)	40GP (set)	40HQ (set)
LRC-H30W	CTN#1: 2 Lamps/CTN	820*260*460	20.7	370	820	1000
	CTN#2: 2 Sets of Parts/CTN	380*330*200	7			
LRC-H40W	CTN#1: 2 Lamps/CTN	940*260*460	24.2	320	730	900
	CTN#2: 2 Sets of Parts/CTN	380*380*200	7			
LRC-H60W	CTN#1: 2 Lamps/CTN	1185*260*460	29.5	240	530	650
	CTN#2: 2 Sets of Parts/CTN	380*380*320	10.93			
LRC-H80W	CTN#1: 2 Lamps/CTN	1495*260*460	37.5	200	450	550
	CTN#2: 2 Sets of Parts/CTN	380*380*320	10.93			
LRC-H100W	CTN#1: 2 Lamps/CTN	1700*330*460	46.4	120	290	350
	CTN#2: 2 Sets of Parts/CTN	510*310*460	20.85			
LRC-H120W	CTN#1: 2 Lamps/CTN	2000*330*460	50.85	110	250	310
	CTN#2: 2 Sets of Parts/CTN	510*380*460	20.85			

THANKS

All in ONE



Solar Street Light

- ▶ LRC-I20W
- ▶ LRC-I30W
- ▶ LRC-I40W
- ▶ LRC-I60W

20-60W

Lamp power

30-75W

Solar Panel Power

216-460Wh

Battery Capacity

PIR Motion Sensor



New M10
Mono
Solar panel



Smart
Control
System



High
Performance
Li-Battery



High
Lighting
Efficiency
LED



Rust-proof
And
Corrosion
Prevention



Intelligent
PIR
Sensor



Bluetooth
MESH
Networking



IP 65





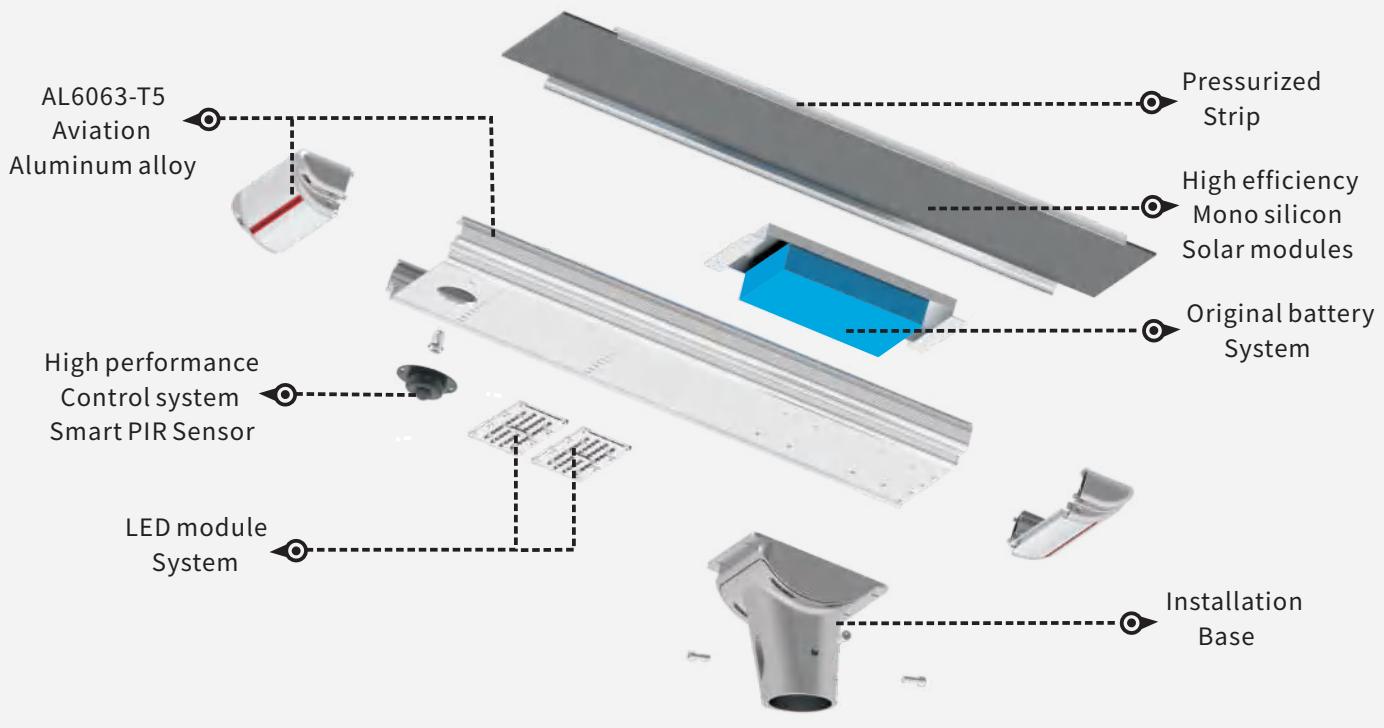
Original integrated concept, double arc streamline element design;

New generation of battery cell, power of same area increased by 20%;

Innovative structure design, adjustable installation angle, easy maintenance;

Smart control with cell phone APP, Bluetooth MESH networking.

Simple installation, easy maintenance.
Each part is imaginative, all materials
are carefully selected.
Protected against all weathers.



Our Advantages

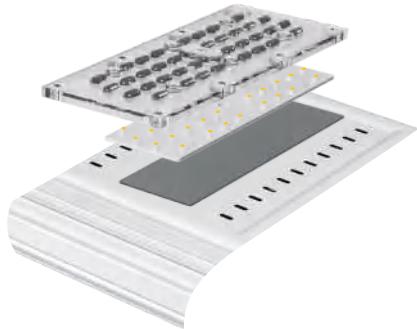


About LED

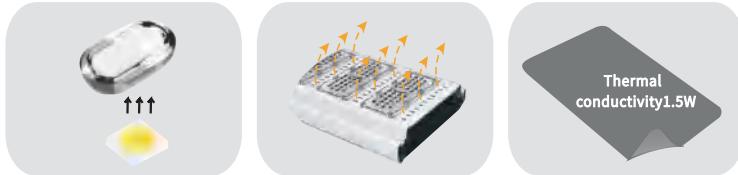


PHILIPS® 3030 SMD LED lights

- ◆ High bright SMD LED lights, lighting effect up to 210Lm/W;
- ◆ High quality LED Chips, even brightness, strong reliability;
- ◆ Super low light decay, 5% lower compare to competitors, Lifespan up to 80,000 hours.

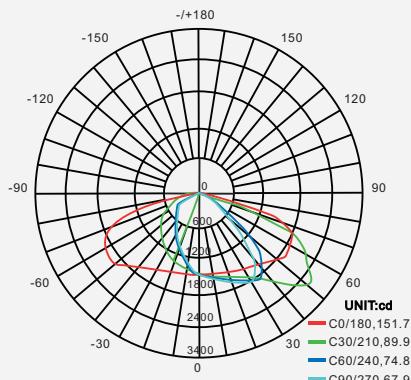


Professional Optical Design

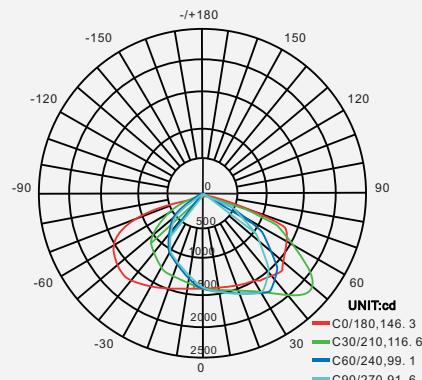


- ◆ Professional optical design for roadway lighting;
- ◆ Bat wing light distribution optimized the lighting effect and enlarge the lighting area by 40% and the lighting uniformity increased by 50%;
- ◆ Aviation aluminum heat dissipation, rapid heat conduction, good heat dissipation effect.

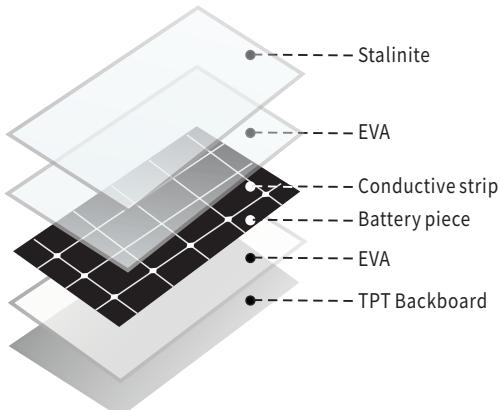
Type 2



Type 3

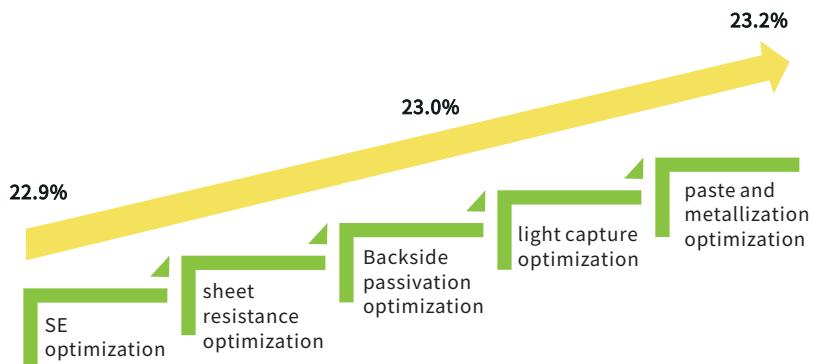


About Solar Panel

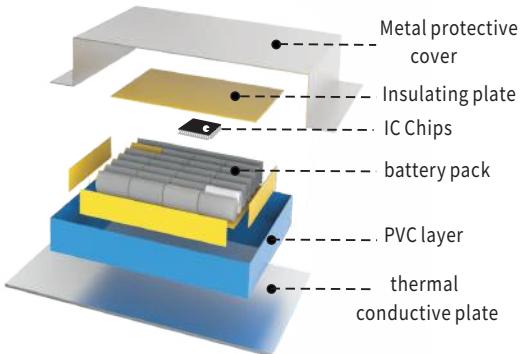


High Conversion Efficiency MONO Solar Panel

- Adopts A grade high quality semiconductor M10 solar cells ;
- Weak light power generation is good, power lost from shadow is small;
- High conversion efficiency up to 23.3%.

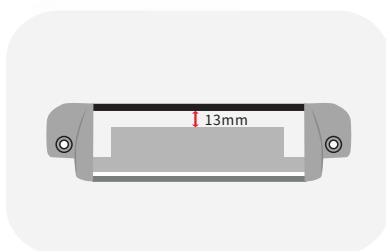


About Battery

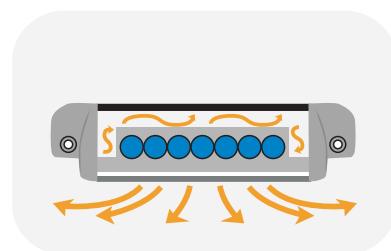


Integrated Battery Protection System

- Military grade LiFePO4 Battery, High Safety and stability ;
- Long lifespan, More than 2000 Battery light cycles ;
- Dual charge and discharge management, temperature protection, military grade IC chip control.



13mm gap between battery and solar panel, more air convection and Effectively block the high temperature of the external environment transferring the heat to battery.



Low-surface aluminum panel design, efficient and rapid thermal conductivity, increase the heat dissipation area, effectively increase the heat dissipation effect, prolong the lifespan.



Smart control system



- Constant current driving, Stable current output;
- Smart energy management, adjust the output power according to the battery capacity to prelong the lighting hours;
- Mobile phone APP control, with BEL5.0 MESH networking function, Neighboring devices form their own LAN and communicate with each other and achieving ultra remote control (optional)



APP Bluetooth control



Low power consumption

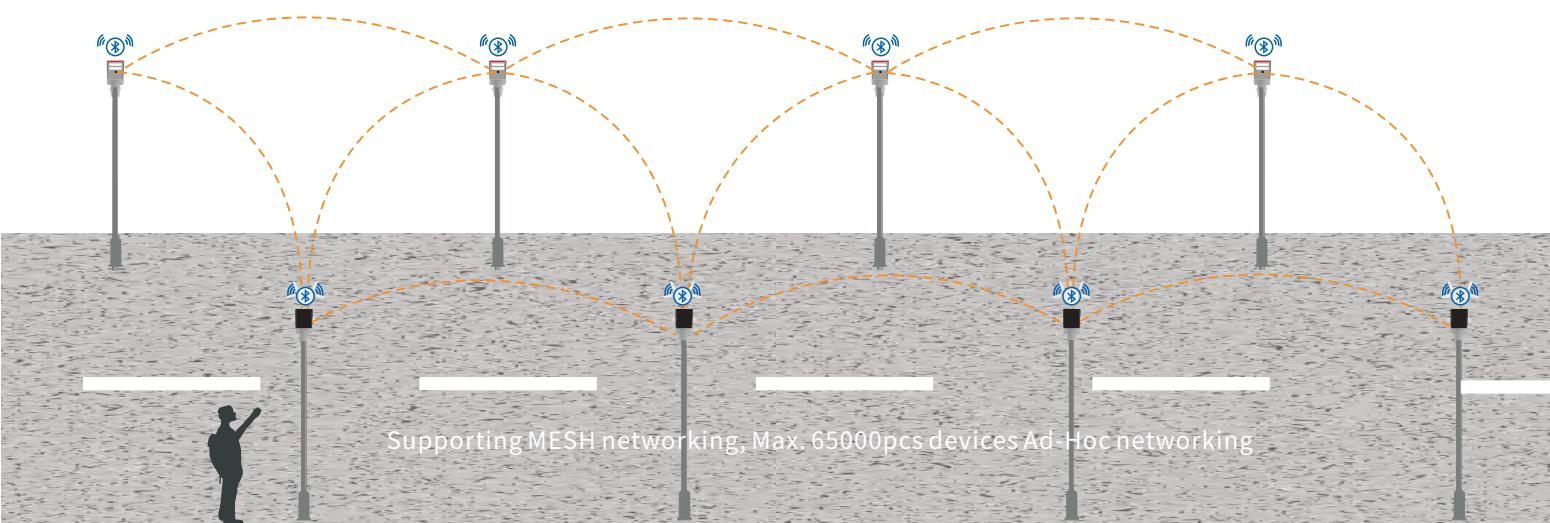


Anti-interference



Ad-Hoc Network

Wide range



Smart control

30%
when no motion



100%
when motion detected



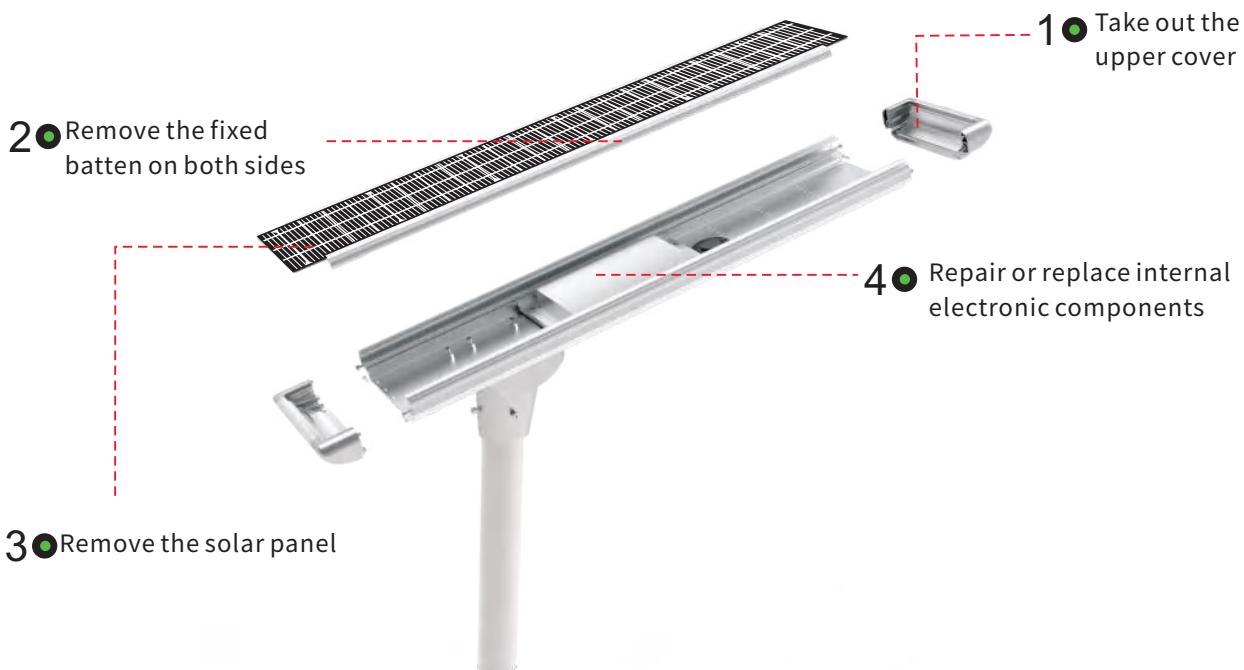
30m
Ave.:15Lux
(LRC-140W)

6m
(Installation Height)

10m
(Illuminate Area)

Innovative structural design

Easy Maintenance



Easy Installation



- Installation angle adjustable
- Concave and convex of gear combination, more secure
- Rust-proof and corrosion prevention, can be used for different environments.

TECHNICAL DATA

LRC-I Series

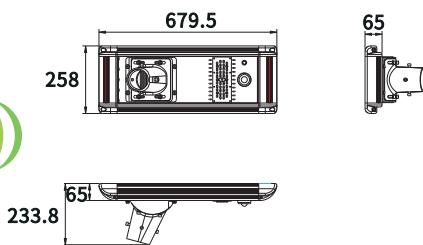
Model	LRC-I20W	LRC-I30W	LRC-I40W	LRC-I60W
Physical Parameters				
LED Brand	PHILIPS	PHILIPS	PHILIPS	PHILIPS
LED Qty(Grains)	36	72	108	144
Power of PV Module(W)	18V 30W	16V 40W	18V 55W	16V 75W
LIFEPO4 Battery Capacity(Ah)	12.8V 230.4Wh	12.8V 307.2Wh	12.8V 384Wh	12.8V 460.8h
Light Mode	PIR/Time Control	PIR/Time Control	PIR/Time Control	PIR/Time Control
Product Dimension(mm)	679.5*258*65	859.5*258*65	1229.5*258*65	1589.5*258*65
Product N.W.(kg)	12	16	22	24
Package #1 Dimension(mm)& G.W. (1 Lamp/CTN)	735*315*200 (20KG)	915*315*200 (24KG)	1285*315*200 (28KG)	1645*315*200 (30KG)
Package #2 Dimension(mm)& G.W. (1 Lamp/CTN)		215*215*210 (3KG)		
Light Parameters				
Light Power(W)	20W	30W	40W	60W
Tyical Liminous Flux(Lm)	3600	5400	7200	10800
LED Light Effect(Lm/W)		210Lm/W		
Color Temperature(K)		2700-6500		
Beam Angle(°)		150°x 80°		
Rainy Days(D)		3~5		
Environment Parameters				
Charging Temperaure(°C)		0 °C to +60 °C		
Discharging Temperaure(°C)		-20 °C to +60 °C		
Storage Temperaure(°C)		-20 °C to +45 °C		
Installation				
Dia. of Top Pole (mm)	60~76	60~76	60~76	60~76
Installation Height(m)	4~6	5~7	6~8	7~9
Installation Distance (m)	15~25	20~30	25~35	30~40



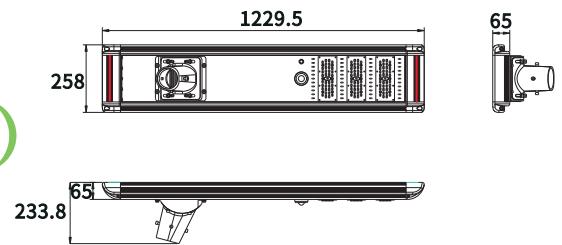
Product Dimension (LRC-I Seires)

(Unit:mm)

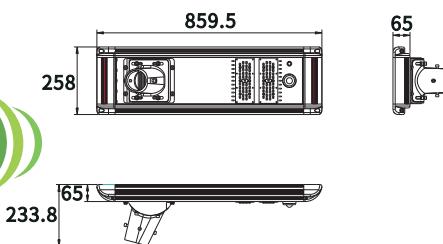
20W



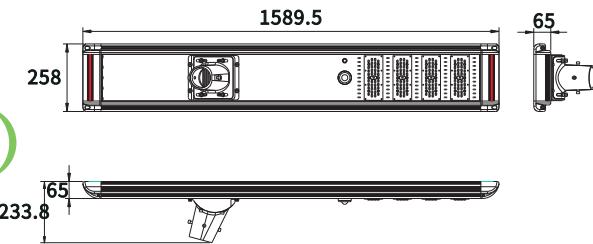
40W



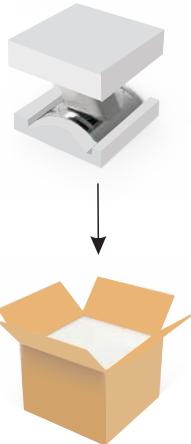
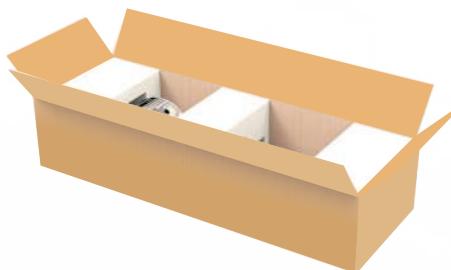
30W



60W



Product Packing Details



Model	Carton details (2 cartons)	Packaging size (mm)	G.W (kg)	20" GP (set)	40" GP (set)	20" HQ (set)
LRC-I20W	Carton 1 (Lamp)	735*315*200	20	410	900	1110
	Carton 2 (Accessories)	215*215*210	3			
LRC-I30W	Carton 1 (Lamp)	915*315*200	24	330	740	920
	Carton 2 (Accessories)	215*215*210	3			
LRC-I40W	Carton 1 (Lamp)	1285*315*200	28	250	560	690
	Carton 2 (Accessories)	215*215*210	3			
LRC-I60W	Carton 1 (Lamp)	1645*315*200	30	200	450	550
	Carton 2 (Accessories)	215*215*210	3			

Installation Suggestion



Model	LRC-I20W	LRC-I30W	LRC-I40W	LRC-I60W
Installation Height	5M	6M	7M	8M
Illumination Area	$18*6=108\text{m}^2$	$18.5*6.5=120.3\text{m}^2$	$19*7=133\text{m}^2$	$20*8=160\text{m}^2$
Average Illumination(lx)	15Lux	12Lux	10Lux	7Lux
Suggested Installation Height	4-6m	5-7m	6-8m	7-9m